



TECHNOLOGY AVAILABLE FOR LICENSING

Electro-Pneumatic Distributor for Microfabricated μ –TAS Devices

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Invention Details:

The invention consists of a plastic distributor connected to a microfluidics device by a gasket. The distributor contains a gas channel and an electric conductor, which supplies an electric current and pressurized gas to the system. The electrical current forces the sample to flow in a uniform direction, which controls sample flow dynamics. The pressure created in the system controls fluid dynamics in electric field free regions in the chip. The inventions key advantage is the maximization of sample throughput by analyzing samples by decreasing the time between sample analysis.

Benefits of the Invention:

The technology is a plastic electro-pneumatic distributor assembly used in conjunction with electrospray mass spectrometry. The distributor's purpose is to supply simultaneous electric current and pressurized gas where needed in microfabricated devices.

Advantages:

- Decreased delays between sample analysis
- Disposable
- Elimination of sample cross contamination
- Significantly simplified instrumentation
- High duty cycle
- Maximize sample throughput
- Analyze 720 samples/hr

The Bottom Line:

The electro-pneumatic distributor assembly is a qualitatively different approach to sample injection, permitting a significant improvement in the performance with maximization of sample throughput.

For More Information:

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